

## COMMONWEALTH OF MASSACHUSETTS EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS DEPARTMENT OF ENVIRONMENTAL PROTECTION WESTERN REGIONAL OFFICE

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DEVAL L. PATRICK Governor

TIMOTHY P. MURRAY Lieutenant Governor IAN A. BOWLES Secretary

LAURIE BURT Commissioner

Town of Amherst Department of Public Works 586 South Pleasant Street Amherst, MA 01002

Attention: Guilford Mooring, Supt.

JUN 8 0 2010

Re:

Amherst-DSWM-Landfill Old Amherst Landfill Route 9 (South Side)

Landfill - Major Modification Beneficial Use Determination

Landfill Cap Regrading

10-008-001

BWPSW11/Transmittal #X233280 BWPSW40/Transmittal #X233281

Dear Mr. Mooring:

On May 17, 2010 the Department of Environmental Protection (the Department) received Major Modification and Beneficial Use Determination permit applications (the applications) for the Old Amherst Landfill ("the landfill"), located south of Route 9 (Belchertown Road) in Amherst. The applications were prepared by the Town of Amherst (the Town), Department of Public Works, Engineering Department. The applications were signed by Guilford Mooring, Superintendent of the Amherst Department of Public Works, and the engineering drawings contained in the applications were signed and stamped by Guilford Mooring, Massachusetts-registered Professional Engineer (P.E.) #40651.

The Major Modification application proposes to use fill material and topsoil to regrade portions of the landfill cap, which have developed ponded stormwater and other stormwater runoff issues due to differential settlement since the cap was completed in 1988. The Beneficial Use Determination (BUD) permit application proposes to utilize street sweepings, catchbasin cleanings, and (in one specific cap area) contaminated soil as part of the fill material for the regrading of the cap. On April 8, 2010, the Department had issued to the Town its permit approval of the Final Comprehensive Site Assessment (CSA) report for the landfill; the

Amherst - Old Landfill Major Modification/BUD Permit Approval

Final CSA had recommended regrading of the cap in order to enhance stormwater runoff and reduce leachate generation.

## Proposed Work

The Town proposes the following work to be performed as part of the applications:

- Regrading of the landfill cap would be performed to fill settlement areas and to restore a minimum 2% slope to the landfill cap. The maximum thickness of fill added to the landfill cap would be 5 feet;
- Regrading would be accomplished by cutting the existing grass cover to 3 inches height or less, then depositing and grading fill material directly over the grass, without performing any excavation of the existing cap soils;
- Regrading would be performed in phases, with the initial 10 -acre Phase 1 area (northwest mound, existing gravel road area) completed within one year, and the 4.5-acre Phase 2 area (remainder of northwest mound) completed within two years. The Town initially proposed in the application to also regrade the remaining 12 acres of the landfill (Phase 3), but that proposal has been withdrawn;
- A regrading plan was included in the application;
- Fill materials to be placed directly over the grass of the existing cap would include clean soil, secondary fill material (street sweepings and catchbasin cleanings collected only from the Town of Amherst), and approximately 4,000 cubic yards of soil contaminated with agricultural arsenic generated from the Bay Road/Route 116 roundabout construction project in Amherst;
- The arsenic-contaminated soil, which contains an average of 46 milligrams/kilogram (mg/kg) of arsenic, would be placed only in a 1.7-acre area in the center of Phase 1, and would be covered by at least 3 feet of secondary fill material, clean fill and topsoil;
- All fill material areas would be covered with a minimum of 6 inches of clean fill and 4 inches of topsoil, and the topsoil would be seeded with native habitat grasses, using a New England native warm season grass mix;
- A Risk Assessment for the utilization of the arsenic contaminated soil was completed in accordance with the Department's Bureau of Waste Site Cleanup Method 3 ShortForm Version 6-06. The Risk Assessment concluded that the use of the arsenic-contaminated soil (and the secondary fill material) as proposed did not pose a Significant Risk of Harm to Human Health;
- In order to limit impact to the endangered Grasshopper Sparrow, regrading will be limited to 1.75-acre sections of the cap at a time, whereby each 1.75-acre section will be

filled, graded and seeded before beginning the next 1.75-acre section. A Massachusetts Endangered Species Act (MESA) application (#10-27804) was submitted by the Town to the Massachusetts National Heritage and Endangereed Species Program (NHESP);

- Prior to work, sedimentation fencing and "Silt Soxx" (sedimentation-control wattles) would be installed around the work areas;
- The existing stormwater control basin at the northern perimeter of the landfill would be improved by removal of sediment, rebuilding of the inlet and outlet to make the basin function as a sedimentation basin, installation of a sediment control device at the inlet, and installation a new, 12-inch outlet pipe;
- The existing stormwater control swales on the cap would be regraded, established 10-feet wide, and covered with a 1-foot thickness of stone rip-rap;
- The existing landfill gas vents in the cap would be extended with PVC pipe; and
- The existing gravel access road in the Phase 1 Area would be improved by adding 8 to 10 inches of processed gravel, with 4 inches of trap-rock gravel at the surface.

The Town submitted a copy of correspondence from the Massachusetts Executive Office of Energy and Environmental Affairs (EOEEA) which states that the proposed work is not subject to MEPA review, as applicable MEPA thresholds would not be triggered.

## DEPARTMENT DETERMINATIONS

The Department has reviewed the Major Modification and Beneficial Use Determination permit applications under the authority of MGL Chapter 111 Section 150A and the regulations promulgated thereunder at 310 CMR 19.000, and the Department's "Draft Interim Guidance Document for Beneficial Use Determination Regulations", dated March 18, 2004 (the BUD Guidance). This document is a Major Modification and Beneficial Use Determination permit issued in accordance with the review procedures stipulated at 310 CMR 19.037, 19.039 and 19.060 and is subject to all of the provisions contained therein.

The Department hereby issues this Major Modification permit which modifies the June 25, 1985 Closure Plan permit approval for the landfill as outlined below. All other applicable conditions of that permit approval remain unchanged and in effect. This permit is also a Category II - Regulated Systems Beneficial Use Determination (BUD) permit approval, as outlined below.

 As proposed, no excavation of the existing cap shall be performed, regrading shall be accomplished only by the addition of fill and regrading of the fill material.

- 2. As proposed, erosion/sedimentation controls shall be placed around all work areas prior to the start of any work.
- 3. Three co-located surface water and sediment samples shall be obtained from the northern stormwater retention basin before the beginning of regrading work, during regrading work, and following completion of regrading work, and shall be analyzed for arsenic (surface water samples as dissolved arsenic). The results shall be submitted to the Department upon receipt from the laboratory.
- 4. Use of the arsenic-contaminated soil (the contaminated soil) as fill material shall comply with the following conditions:
  - A. The contaminated soil shall only be used within the area in Phase 1 as designated on Engineering Sheet 4 of the Major Modification application.
  - B. The Town shall maintain temporary fencing (plastic mesh fencing, minimum 3' high) around the entire contaminated soil use area to restrict public access to the area during delivery and grading of the contaminated soil, until all of the contaminated soil is covered as outlined in Condition 4F below.
  - C. The contaminated soil shall only be dumped directly into the designated area, and all of the contaminated soil shall be delivered to the site within a one-week time period.
  - D. The contaminated soil shall be graded and shall initially be covered with at least 6 inches of secondary fill material (or clean fill) within a one-week time period following the completion of delivery to the site.
  - E. All incoming loads of contaminated soil shall be wetted sufficiently by the trucking contractor to mitigate or eliminate dust conditions upon delivery to the landfill. The Town shall also utilize a water truck on-site to mitigate or eliminate dust conditions during all delivery of the contaminated soil to the landfill and during all grading of the contaminated soil.
  - F. As proposed, a minimum of 3 feet of soil fill shall be placed over the entire area of contaminated soil. The bottom 2 feet may consist of secondary fill material, with at least 6 inches of clean fill and 6 inches of topsoil above the secondary fill.
- 5. All secondary fill material (i.e., street sweepings and cathchasin cleanings) shall be covered by at least 6 inches of clean fill and 6 inches of topsoil. The minimum topsoil thickness allowed for any regrading work is 6 inches. "Clean

fill" and topsoil cannot be obtained from known contaminated sites, and shall be sampled every 2,000 cubic yards for volatile organic compounds (VOCs) by EPA Method 8260 and RCRA 8 metals. The results of such sampling shall be submitted to the Department upon receipt from the laboratory. Clean fill and topsoil shall meet the Department's S-1, GW-3 soil standards for "accessible" soil.

- 6. Only Phases 1 & 2 of the proposed regarding work shall be completed, except as follows: the only regrading work to be completed in Phase 3 shall be filling of the localized depression area within the southern perimeter of the landfill cap and the depression area along the base of Phase 2 within the cap; Phase 1 work shall be completed within one year of the date of this permit; and Phase 2/3 work shall be completed within two years of the date of this permit.
- 7. Any standing water in depressed areas of the cap shall be pumped out prior to placement of any fill materials in those areas.
- 8. As proposed, regrading shall be accomplished in 1.75-acre sections, with filling, grading, and seeding finished within each section prior to beginning work on the next section.
- 9. A cross-slope interceptor stormwater swale shall be constructed along the southern perimeter of Phase 2, beginning at the top of the 3:1 slope at the western edge and running with a minimum slope of 1% along the 3:1 slope of Phase 2, connecting with the proposed "Grass Swale" along the eastern perimeter of Phase 1. The entire length of this swale, from its beginning to its terminus at the stormwater retention basin, shall be lined with geomembrane (40 or 60-mil HDPE), shingled in the downstream direction.
- 10. All existing site groundwater monitoring wells and landfill gas monitoring wells shall be protected from damage during the regrading work. If any wells are damaged or destroyed, they shall be repaired or replaced as required by the Department.
- 11. A healthy and adequate stand of grass shall be established on all regraded areas within a reasonable timeframe after completion. The Town shall reseed all areas as needed to achieve adequate grass growth.
- 12. The Town shall not dispose of snow in the interior of the Phase 1 area.
- 13. The Town shall remove the scrap culverts from the landfill cap and shall repair the gate to the landfill within 60 days of the date of this permit. The Town shall ensure that the gate remains locked at all times when Town personnel are not actively working on the landfill.

- 14. The Town shall submit quarterly and annual progress reports to the Department describing the regrading work.
- 15. The Town shall perform environmental monitoring and maintenance of the landfill as outlined in the Department's April 8, 2010 permit approval of the Final CSA report for the landfill.

The Department reserves the right to modify, suspend or rescind this permit at any time, should nuisance conditions be produced, or should Department inspections or monitoring results indicate threats to public health, safety or the environment from the regrading work.

The Department and its agents and employees shall have the right to enter upon the site at all reasonable times and without notice, to inspect the landfill and any equipment, structure or land located thereon, take samples, recover materials or discharges, have access to and photocopy records, to perform tests and to otherwise monitor compliance with this Permit and all environmental laws and regulations. This right of entry and inspection shall be in addition to the Department's access authorities and rights under applicable federal and states laws and regulations, as well as any permits or other agreements between the Permittee and the Department.

Pursuant to 310 CMR 19.037(5), any person aggrieved by the issuance or denial of this permit decision, except as provided for under 310 CMR 19.037(4)(b), may file an appeal for judicial review of said decision in accordance with the provisions of M.G.L. c. 111, s. 150A and c. 30A not later than thirty [30] days following the receipt of the final permit. The standing of a person to file an appeal and the procedures for filing such appeal shall be governed by the provisions of M.G.L. c. 30 A. Unless the person requesting an appeal requests and is granted a stay of the terms and conditions of the permit by a court of competent jurisdiction, the permit decision shall remain effective or become effective at the conclusion of the 30 day period.

Any aggrieved person intending to appeal the decision to the superior court shall provide notice to the Department of said intention to commence such action. Said Notice of Intention shall include the Department File Number (10-008-001) and shall identify with particularity the issues and reason(s) why it is believed the approval decision was not proper. Such notice shall be provided to the Office of General Counsel of the Department and the Regional Director for the regional office which made the decision. The appropriate addresses to which to send such notices are:

General Counsel
Department of Environmental Protection
One Winter Street-Third floor
Boston, 02108

Regional Director
Department of Environmental Protection
436 Dwight Street - Fifth Floor
Springfield, MA 01103

No allegation shall be made in any judicial appeal of this decision unless the matter complained of was raised at the appropriate point in the administrative review procedures established in those regulations, provided that matter may be raised upon a showing that it is material and that it was not reasonably possible with due diligence to have been raised during such procedures or that matter sought to be raised is of critical importance to the public health or environmental impact of the permitted activity.

This approval pertains only to the Solid Waste Management aspects of the proposal and does not negate the responsibilities of the owners or operators to comply with any other local, state or federal laws and regulations now or in the future.

If you should have any questions or comments regarding this correspondence please contact Larry Hanson of this office, at #413-755-2287.

Sincerely

Daniel Hall Section Chief

Solid Waste Management

cc: Amherst Health Dept. - Director

Amherst - Town Manager Larry Schaeffer